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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/446,449	04/19/2000	HIDEHIRO AKAHANE	P4469B	2329	
20178	7590 03/28/2002				
EPSON RESEARCH AND DEVELOPMENT INC INTELLECTUAL PROPERTY DEPT 150 RIVER OAKS PARKWAY, SUITE 225			EXAM	EXAMINER	
			GOODWIN, JEANNE M		
SAN JOSE, C	CA 95134		ART UNIT	PAPER NUMBER	
			2841		
			DATE MAILED: 03/28/2002	!	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)	Applicant(s)			
Office Action Summary		09/446,449	AKAHANE ET AL.				
		Examiner	Art Unit				
		Jeanne-Marguerite Good		roco			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status							
1) 🖾	Responsive to communication(s) filed on 26 (	October 2001 .					
2a)□	<u> </u>	is action is non-final.					
3)							
Disposition of Claims							
4)⊠	Claim(s) $1-16$ is/are pending in the application	l <b>.</b>					
4a) Of the above claim(s) is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.							
6)⊠	Claim(s) <u>I-I6</u> is/are rejected.						
7)	Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.							
Application Papers							
9) The specification is objected to by the Examiner.							
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved by the Examiner.							
If approved, corrected drawings are required in reply to this Office action.							
12)	The oath or declaration is objected to by the Ex	aminer.					
Priority under 35 U.S.C. §§ 119 and 120							
13)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
a)⊠ All b)□ Some * c)□ None of:							
	1. Certified copies of the priority documents have been received.						
	2. Certified copies of the priority documents have been received in Application No						
<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>							
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).							
a) The translation of the foreign language provisional application has been received.  15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.							
Attachment(s)							
2) Noti	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice	w Summary (PTO-413) Paper No( of Informal Patent Application (PTo				

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#### **DETAILED ACTION**

### Claim Objections

- 1. Claims 2-16 are objected to because of the following informalities:
  - a. In claims 2-4, line 1: --multifunctional-- should be added for consistency,
  - b. In claim 2, line 2; claim 6, line 2; claim 12, line 2: "the power-supply" lacks antecedent basis,
- c. In claim 3, lines 3-4: "the electrical ON state" and "the OFF state" lacks antecedent basis,
  - d. In claim 6, line 3; claim 12, line 3: "the driving voltage" lacks antecedent basis,
  - e. In claim 6, line 4: "the operation" lacks antecedent basis,
  - f. In claim 7, line 7: "a" before "driving signal" should be --the-- for antecedent basis.

    Appropriate correction is required.

# Claim Rejections - 35 USC § 112

2. Claims 6 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 6 and 12, lines 4: the claim language is confusing and indefinite because it is unclear which voltage, e.g. the power-supply voltage or the driving voltage, the driving signal returns to for allowing the operation. Furthermore, the phrase, "the operation" is indefinite because it is not clear what operation the applicant is relying upon.

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# Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1, 3-5 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Kusumoto et al. [hereinafter Kusumoto].

Kusumoto discloses a stop watch comprising:

a hands (8, 9, and 10) for indicating at least an arbitrary measured elapsed time,

a mechanisms (2, 3, 11 and 12) for disabling the hand from being returned to zero after the hand is driven and for enabling the hand to returned to zero after the hand is stopped, wherein the hand is stopped when an electrical ON state is switched to an OFF state by stopping with the mechanisms, respectively; and the mechanisms starting and stopping the hand, wherein a driving

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signal for the hand is switched to a stop signal by stopping the hand with the mechanisms, respectively,

the driving signal (first and second) for the hand is continuously maintained after the driving of the hand is started, except when the hand is normally stopped.

With respect to claim 16: the method step will be met during the normal operation of the device stated above.

5. Claims 1, 3-5, 9, 10, 12-15 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Piguet et al. [hereinafter Piguet].

Piguet discloses a watch device comprising:

a hand for indicating at least an arbitrary measured elapsed time,

a mechanism (33) for disabling the hand from being returned to zero after the hand is driven and for enabling the hand to returned to zero after the hand is stopped, wherein the hand is stopped when an electrical ON state is switched to an OFF state by stopping with the mechanisms, respectively,

the mechanism (32) for starting and stopping the hand, wherein a driving signal for the hand is switched to a stop signal by stopping the hand with the mechanism,

the driving signal for the hand is continuously maintained after the driving of the hand is started, except when the hand is normally stopped,

a control section having a circuit board (34),

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a lever (42) for making mechanical contact with the circuit board, and
the driving signal for the hand being maintained by keeping the lever in contact with the
circuit board, respectively.

With respect to claim 16: the method step will be met during the normal operation of the device stated above.

### Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 2 and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Piguet in view of Sase.

Piguet discloses a device as stated above with regards to claims 1, 3-5, 9, 10, 12-15 and 16. Piguet discloses all the subject matter claimed by applicant with the exception of the limitation stated in claims 2 and 6, i.e., the driving signal for the hand is maintained when the power-supply voltage falls below the driving voltage for the hand.

With respect to the limitation stated in claims 2 and 6: Sase discloses a charging type

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watch comprising charge alarm display having a driving signal for a hand being maintained when a power-supply voltage falls below a driving voltage for the hand in order to be able to obtain a correct time display after the recovery of the power-supply voltage. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to add the charge alarm display assembly, as taught by Sase, to device of Piguet, in order to be able to obtain a correct time display after the recovery of the power-supply voltage failure

### Inventorship

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

### Allowable Subject Matter

9. Claim 11 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### **Conclusion**

10. The prior art made of record and not relied upon is considered pertinent to applicant's

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disclosure. The prior art cited in the PTO-892 disclose related devices. Hayakawa discloses charging circuit; Moriya teaches using pull-up and pull- down resistors to consume power; Imamura, Ushikoshi, Samejima and Minowa disclose an electronic stop watch; and Kawaguchi et al. discloses timepiece having recharging capabilities.

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Examiner Jeanne-Marguerite Goodwin whose telephone number is (703) 305-0264. The examiner can normally be reached on Monday-Friday (9am-6pm), alternate Fridays off. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7724. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

JMG March 25, 2002 VIT MISKA

PRIMARY PATENT EXAMINER TECHNOLOGY CENTER 2800